03.01-07/12/95-00491

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Peter W. Schmidt
Director

P. O. Box 10009
Richmond, Virginia 23240-0009
(804) 762-4000

July 12, 1995

Commander
Atlantic Division
Naval Facilities Engineering Command
1510 Gilbert Street
ATTN: CODE 1822, Ms. Brenda Norton, P.E.
Norfolk, VA 23511-2699

Re: Round Two Remedial Investigation and Baseline Risk Assessment Site 16 and Site Screening Area 16, Naval Weapons Station Yorktown, Yorktown Virginia.

Dear Ms. Norton:

Thank you for providing the Department of Environmental Quality, Federal Facilities Section the opportunity to comment on the above referenced Remedial Investigation. We also appreciate the time extensions you have granted to us to complete our review.

Based on our review it appears that the Baseline Risk Assessment determined that there is unacceptable risk (a hazard quotient exceeding one) for some of the monitoring wells under a drinking water scenario. Therefore, further explanation and reassessment of the BLRA is necessary to support the No Action Alternative which is being recommended for the site. Attached are our specific comments and questions concerning this report.

If you have any questions, please feel free to contact me at (804) 762-4202.

Sincerely,

Stephen Mihalko
Remedial Project Engineer

cc: Rob Thomson, EPA Region III
Jeff Harlow, NWS Yorktown
Erica Dameron

Virginia Department of Environmental Quality Comments on Round Two Remedial Investigation and Baseline Risk Assessment for Site 16 and Site Screening Area 16, Naval Weapons Station Yorktown, Yorktown Virginia.

It should be noted that the BLRA determined an unacceptable risk (a hazard quotient exceeding one) for several of the monitoring wells under a drinking water scenario. Therefore it is essential that the likelihood of using the aquifer as a potable source be adequately considered when deciding whether to support the no action alternative. (Also note that this BLRA uses maximum concentrations in individual monitoring wells to assess exposure. In EPA's comments they have asked for a reassessment based on the 95% UCL on the mean of all the wells. This will likely result in a lower estimate of risk which may be within the acceptable range.) Specific comments are as follows.

1. Page 6-1, Section 6.1: This section briefly discusses the use of groundwater at the WPNSTA. According to this section the shallow aquifers are not used as a drinking water source. It is not clear whether this is because they cannot be used as a potable source or that they are not used because other sources are available. This section indicates that a well near Gate 13 has been approved for potable use (although it is not currently used as such). It is not clear whether this well is a shallow aquifer well. The risk assessment appropriately evaluates the groundwater as a potential future potable source. For remedial action decisions, however, more information will be needed to determine the likelihood that the aquifer would ever be used. Information on the physical characteristics of the aquifer that effect its future use as a potable source should be provided. Also indicate whether there are any institutional controls in place that the would prevent the use of groundwater as potable source.

2. Page 6-4, Section 6.2.1: This section notes that for semivolatile contaminants the blank concentration was multiplied by 5 or 10 and then multiplied by 33 to account for the variance in the CRQL between the aqueous and solid media. It appears on Table 6-1 that this was done for volatile contaminants as well. It is not clear why this was done for volatile contaminants since the quantitation limits are similar for aqueous and solid samples.

3. Page 6-22, Section 6.3.4: Recreational users (hunters) should also be included as potential receptors since hunting takes place at the installation in the vicinity of this site.

4. Page 6-32, Section 6.3.6.1: The basis for using 8 hours per day as the exposure time (ET) for surface water for current

civilian workers is unclear. This would likely result in an overly conservative exposure estimate.

5. Page 6-33, Section 6.3.6.2: It should be noted that the exposure time of 2 hours per day is not applicable to a residential scenario for surface soil. The text should be corrected as well as Table 6-10. (It appears from Appendix L that this ET has not been included in the calculations.)

6. Section 6.6: This section should also discuss the contaminants that drive the risk for any pathways that result in an unacceptable risk.

7. Table 7-2: The manganese concentration range shown on this table exceeds both the SSSLs and the background range but manganese has not been retained as a chemical of concern. This apparent discrepancy should be either corrected or explained.

8. Table 7-4: The iron concentration range shown on this table exceeds both the SSSLs and the background range but iron has not been retained as a chemical of concern. This apparent discrepancy should be either corrected or explained. In addition, footnote (5) on this table has not been defined.